**Jeff Haislet
Chairman, Region 49
Brazos County 9-1-1 District
P. O. Box 2291
Bryan, Texas 77806-2291

* Members of Region 50 Public Safety Communications Advisory Committee

**Resource Members of Region 50 Public Safety Communications Advisory Committee

APPENDIX A

PROOF OF PUBLICATION FROM THE MIDLAND REPORTER-TELEGRAM FOR ADVERTISEMENT OF FIRST MEETING.

NOTICE OF FIRST PLANNING MEETING, AS SENT VIA THE TLETS STATE-WIDE COMPUTER SYSTEM.

LETTER TO REGION 50 PLANNING COMMITTEE MEMBERS REQUESTING ATTENDANCE AND PARTICIPATION IN THE REVIEW AND COMMITTEE APPROVAL OF THE REGIONAL PLAN.

50 LEGAL NOTICES

NOTICE TO BIDDERS
The Board of Trustees of the Midland Independent School District, Midland Texas is requesting bids on Digital Duplicators. Bid specifications and regulations may be secured from the Director of Purchasing 8001 County Road 60 West Midland Texas Phone 689 6076

NOTICE TO BIDDERS
The Board of Trustees of the Midland Independent School District, Midland Texas is requesting bids on Storage Additions. Bid specifications and regulations may be secured from the Director of Purchasing, 8001 County Road 60 West Midland Texas Phone 689 6076

NOTICE TO BIDDERS
The Board of Trustees of the Midland Independent School District Midland Texas is requesting bids on a Public Address System. Bid specifications and regulations may be secured from the Director of Purchasing 8001 County Road 60 West Midland Texas Phone 689 6076

PUBLIC NOTICE

Having been duly certified to the Federal Communications Commission (FCC) by the Associated Public Safety Communications Officers Inc (APCO) as the Convenor of an initial meeting of representatives of parties eligible for radio licensing in the FCC's Public Safety and Special Emergency Radio Services to establish a Regional Planning Committee in the State of Texas in Region 50 as described hereinafter, I hereby give Public Notice that such an initial meeting will be held on May 10th 1989 at the Permian Basin Regional Planning Commission 2514 Pliska Drive Midland International Airport Texas beginning at 9:00 AM. This Region is one of 55 established by the FCC throughout the United States.

The responsibility of the Regional Planning Committee will be to develop a plan for use of frequencies in the 821 [illegible] Megahertz bands allocated by the FCC for use by such licensees. Parties interested in participating in the regional planning process should contact [illegible]

[illegible] in accordance with the FCC Report and Order in General Docket 87-112 adopted by the [illegible] 18 1987

[illegible] Report and Order [illegible] of the [illegible] Safety Planning Advisory Committee, which was submitted to the FCC on September 9, 1987.

Copies of both the Report and Order and the Final Report of the National Public Safety Planning Advisory Committee, which was submitted to the FCC on September 9 1987

Copies of both the Report and Order and the Final Report are available from the FCC's duplication Contractor, International Transcription Services, Inc., Suite 140, 2100 M Street, NW, Washington, D.C., 20037 Phone (202) 857 3800
March 12, 1989

110 LODGE NOTICES

MIDLAND Centennial Masonic Lodge #1448
1000 Upland street
Stated meetings 1st and 3rd Saturdays
Breakfast 7:30am
Open Lodge 8:30am
Come Join Us!
Jerry Cowan, W.M.
H.S. Elliot, Secretary

The Midland Shrine Club 2019 Trade Drive 685-1790 Regular stated meeting third Thursday each month March 16th, 1989 Hospitality 6:30 pm Catered dinner 7 pm Business meeting 8 pm. All nobles and their ladies invited
Russ Holmberg, President.
Sam Bradley, Secretary.

Keystone Chapter & Council R.A.M. & R.S.M. 1st Tuesday of month 7:30 p.m. Midland Commandery #84 1st Thursday of month, 7:30 p.m. Practice Wednesday nights 7:30 p.m.

Midland Scottish Rite Association
Maundy Thursday Observance
Thursday
March 16th
7:30 PM
Lodge Hall
1600 W. Wall

115 ANNOUNCEMENTS

★ OPENING FRIDAY, MARCH 10th ★

KEN'S PLACE

BREAKFAST • DINNER • SUPPER • LUNCHES TO GO •
• WINE • BEER • LIQUOR •
POOL • DOMINOES
LIVE MUSIC • DANCING • NO COVER

117 EAST WALL ST. 683-4536
next door to Wall St Bar & Grill

TONJA
JOANNE B.
PLEASE
COME HOME?!!
L. PALMER

110 LODGE NOTICES

Acacia Masonic Lodge #1414
1000 Upland
Stated Meetings
2nd & 4th Tuesday
7:30 pm
Ron Yaeger W.M.
J.H. Beaty Secretary

Midland Lodge 623 AF & AM 1600 W Wall 682 3292
Regular stated meetings 2nd and 4th Thursday 7:30 pm
March 13th Floor School 7:30 pm
March 18th work in MM Degree 8 am
Tom Vaughan W.M.
R.G. Riker Secretary

105 HAPPY ADS

FRONT Line dancers Great gift for your wife, bachelorette or private party 683 8208 or 697 5594

115 ANNOUNCEMENTS

NOW OPEN
THE SMOKE HOUSE
3607 S. HWY 349
Lunch 11 2 Dinner 5 9 Family style restaurant Mesquite smoked barbecue, charcoal grill hamburgers to perfection!
Call 683 5809

EASTER BUNNY EASTER CHICKEN costume rental Reserve now Call Costumes By Dorothy 694 7687

115 ANNOUNCEMENTS

ERMA NORRIS
is working again at J.C. Penneys styling salon, inviting old & new customers to call for appointment.
699-6541

SPECIAL THANKS
To all friends & Acquaintances of the
ELLEN HALL & GRIMES FAMILIES
during the death of our mother
"Thank you sincerely for sharing our sorrow.
Your kindness is deeply appreciated and will always be remembered."
Thank you with love
The Ellen Hall & Grimes Families

130 PERSONALS

INTRODUCING Gail McCabe to Accent Beauty Salon. Specializing in perms, cuts and manicures. Call 687 8870 Walk-ins welcome.

ADOPTION: loving, educated, secure professional couple wants to share their warm family life and beautiful home with newborn. Expenses paid. Call Sheila and Mike collect evenings/weekends. 201-819-9725

HERBALIFE INDEPENDENT DISTRIBUTORS CALL US FOR PRODUCTS CALL HELEN AND DICK WHITMAN 685-1423

Adoption
ANSWER OUR PRAYERS
Financially secure loving couple with lots of TLC to give anxious to adopt caucasian baby. Med./Legal expenses pd. Call collect 201 652 7184

ADOPTION
Loving Southern California couple wishes to adopt newborn. Please call
COLLECT 818 719 1957

LOOSE WEIGHT!
HAVE YOU HEARD Oprah Winfrey lost her weight on a protein sparing modified fast program. Unable to afford the expenses of clinical programs?
Call 689 6446
for an affordable alternative

130 PERSONALS

ADOPTION
Happily married, financially [illegible] professional couple wishes [illegible] new born. Let us provide a [illegible] happy home for your baby and [illegible] this difficult time easier for you. Legal, confidential
Call collect, 212-473-7251

[illegible] A Cross $19.95 [illegible] Linda, P.O. Box 14106 [illegible] Texas 79768, 915-[illegible]

[illegible]

LOOKING for [illegible] for work references. Can be contacted at 684-9444, [illegible]

ADOPTION
Happily married, financially secure couple wants to adopt newborn. Will be full-time Mom. All expenses paid. Confidential and legal. Call collect anytime 413-567-[illegible]

RESTHAVEN Memorial Park, Garden of Good Shepherd, four spaces for sale. Price negotiable. Call 915-[illegible] 2614

VILLAGE
CAR WASH & AUTO CENTER
Professional Detail Center
SPECIAL FOR MARCH
Complete Detail
Reg. $139.95 NOW $[illegible]
Stop by today or call and make your appointment for your detail special to protect the interior, exterior and engine of your car.
"Where you get a superior job at an affordable price."
604 Andrews Hwy.
Call for your appointment
684-9485

ADMINISTRATIVE MESSAGE FROM: MLSW TIME/DATE OF MESSAGE INPUT: 12:29 05/02/89.

TO ALL PUBLIC SAFETY AGENCIES INCLUDING LAW ENFORCEMENT, FIRE, EMS, SPECIAL EME
RGENCY, CIVIL DEFENSE AND ENTITY OPERATED RADIO REPAIR FACILITIES

HAVING BEEN DULY CERTIFIED TO THE FEDERAL COMMUNICATIONS COMMISSION (FCC) BY TH
E ASSOCIATED PUBLIC-SAFETY COMMUNICATIONS OFFICERS INC.(APCO), AS THE CONVENOR
OF AN INITIAL MEETING OF REPRESENTATIVES OF PARTIES ELIGIBLE FOR RADIO LICENSIN
G IN THE FCC'S PUBLIC SAFETY AND SPECIAL EMERGENCY RADIO SERVICES TO ESTABLISH
A REGIONAL PLANNING COMMITTEE IN THE STATE OF TEXAS, IN REGION 50 (IDENTICAL TO
DPS REGION 4), AS DESCRIBED HEREINAFTER, I HEREBY GIVE PUBLIC NOTICE THAT SUCH
AN INITIAL MEETING WILL BE HELD ON MAY 16TH, 1989, AT THE PERMIAN BASIN REGION
AL PLANNING COMMISSION, 2514 PLISKA DRIVE, ,IDLAND INTERNATIONAL AIRPORT, TEXAS
, BEGINNING AT 9:00 AM. THIS REGION IS ONE OF 55 ESTABLISHED BY THE FCC THROUGH
OUT THE UNITED STATES. THE RESPONSIBILITY OF THE REGIONAL PLANNING COMMITTEE WI
LL BE TO DEVELOP A PLAN FOR USE OF FREQUENCIES IN HTE 821 - 824 AND 866 - 869 M
EGAHERTZ BANDS ALLOCATED BY THE FCC FOR USE BY SUCH LICENSEES. PARTIES INTEREST
ED IN PARTICIPATING IN THE REGIONAL PLANNING PROCESS SHOULD CONTACT ME.
THIS PUBLIC NOTICE IS IN ACCORDANCE WITH THE FCC'S REPORT AND ORDER IN GENERAL
DOCKET #87-112, ADOPTED BY THE FCC ON DECEMBER 18, 1987.

SGT. B. JOHN MCDANIEL, CONVENOR
MIDLAND COUNTY SHERIFF'S DEPARTMENT
MIDLAND, TEXAS
(915) 688-1014

OUTPUT MSG 292, FROM MLSW 05/02/89 12:29

February 19, 1992

Sir;

Enclosed for your consideration is the completed Region 50 Public Safety Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting on March 17, 1992 at 9:00 AM CST.

This meeting will be held at:

Concho Valley Council of Governments
Southland Plaza
5014 Knickerbocker Road
San Angelo, Texas
(915) 944-9666

The purpose of this meeting is to review and comment on the Final Draft of the Region Fifty (50) 800 Megahertz Communications Plan.

Your input is requested for this plan before it is submitted to the Federal Communications Commission for acceptance.

B. John McDaniel
Chairman, Region 50
Midland County Sheriff's Department
P.O. Box 11287
Midland, Texas 79702
(915) 688-1228

APPENDIX B

LETTER TO CHAIRMEN OF REGIONAL PLANNING COMMITTEES CONTIGUOUS TO REGION 50 REQUESTING REVIEW AND APPROVAL OF THE REGION 50 PLAN.

NOTICE OF INTENT TO FILE AS SENT VIA THE TLETS STATE-WIDE TELECOMMUNICATIONS NETWORK.

February 18, 1992

Don Brooks
Region 53 Chairman
City of San Antonio
Communications Division
P.O. Box 839966
San Antonio, Texas 78283-3966

Charles O. Bowles
Region 40 Chairman
City of Dallas (Retired)
3310 Matador
Garland, Texas 75042

Jeff Haislet
Region 49 Chairman
Brazos County 9-1-1 District
P.O. Box 2291
Bryan, Texas 77806-2291

Irving Skinner
Chairman, Region 29
New Mexico State Police
P.O. Box 5393
Santa Fe, NM 87502

Ken Yoder
Frequency Coordination Advisor
Texas Department of Public Safety
P.O. Box 4087
Austin, Texas 78773-0025

Walt Kelly
Region 52 Chairman
City of Amarillo
Communications
P.O. Box 1971
Amarillo, Texas 79186

Sirs:

Enclosed is a copy of the Region 50 Plan. In compliance with the Federal Communications Commission guidelines, I would request your review and concurrence.

Spectrum was assigned using the APCO/CET packing pr in an effort to minimize interference between contiguous Regions. Consideration was given to border assignments development of this plan.

As part of this Region's Plan, I would prefer to include letters from the adjoining Region Chairman and the State Frequency Coordinator indicating their concurrence with this Plan. If I do not receive correspondence to the contrary by March 10, 1992, your concurrence will be assumed. Your assistance in these matters of mutual interest is appreciated.

B. John Daniel
Region Chairman
Midland County Sheriff's Department
Communications Division
P.O. Box
Midland 9709

ADMINISTRATIVE MESSAGE FROM: MLSW TIME/DATE OF MESSAGE INPUT: 16:58 02/06/92.

SO MIDLAND 020692
REGIONS 4,5 & 6
SPECIAL ATTENTION ALL PUBLIC SAFETY/PUBLIC SERVICE ENTITIES INCLUDED IN THE RIO GRANDE, CONCHO VALLEY, WEST CENTRAL TEXAS, AND PERMIAN BASIN COUNCIL OF GOVERNMENTS. THE COMMUNICATIONS PLAN FOR REGION 50 (WHICH INCLUDES THE ABOVE LISTED AREAS) WILL BE PRESENTED FOR FINAL ACCEPTANCE ON MARCH 17, 1992 AT 9:00 AM CST AT THE CONCHO VALLEY COUNCIL OF GOVERNMENTS, 5014 KNICKERBOCKER, SAN ANGELO. THE REGION 50 COMMUNICATIONS PLAN WILL BE REVIEWED AND SUBMITTED TO THE PLANNING COMMITTEE FOR APPROVAL. UPON THE PLANNING COMMITTEE'S ACCEPTANCE, THIS PLAN WILL BE SUBMITTED TO THE FCC. ALL INTERESTED PARTIES ARE ENCOURAGED TO ATTEND THIS MEETING.
SGT B. JOHN MCDANIEL, CHAIRMAN
REGION 50 PLANNING COMMITTEE
915-688-1228
SO MIDLAND BJM 021648
OUTPUT MSG 013, FROM MLSW 02/06/92 16:58

APPENDIX C

EXPLANATION OF CIRCLEIZING A GEOGRAPHIC AREA

EXPLANATION OF THE FREQUENCY SORT PROGRAM

COPY OF 47 CFR PART 90 SEC 90.601 AND 90.619 CONCERNING PRIVATE LAND MOBILE SERVICE USE OF THE BANDS 821-824 MHz AND 866-869 MHz ALONG THE COMMON BORDER

SHARING PRINCIPLES FOR THE USE OF THE FIVE PUBLIC SAFETY MUTUAL AID CHANNEL PAIRS ON BOTH SIDES OF THE COMMON BORDER

LETTER FROM STATE FREQUENCY COORDINATOR CONCERNING REQUIRED NATIONAL CALLING FREQUENCIES AND STATEWIDE CHANNELS FOR STATE AGENCIES

Circleizing the Geographic Area

In order to define the geographic area for frequency sort, the individual counties, sub-regions, and regions are defined with circles. The circles defining an area must all have the same radius and must not exceed the boundary of the area by more than three miles. The number of circles used to define an area does not have any bearing on the number of channels assigned. The circles used to define the area for the frequency sort program do not represent the location of actual sites within the area. The circleization of the geographic area is used only to define the individual areas within a Region for the frequency sort program.

THE FREQUENCY SORT PROGRAM

R. FLEISSNER

4/4/89

REVISED 4/11/89

Introduction

It must be understood that the Regional Plan must be frequency specific throughout the entire region. Note that it doesn't matter whether or not there are any known eligibles in a specific place at the time the plan is generated.

The task to be accomplished is to preassign specific radio frequencies to both known eligibles and geographic pools for future assignments in an efficient manner, as well as in a compatible manner from an interference standpoint.

It has been determined that a Region can be subdivided into sub-regions equal to or smaller than counties for the purpose of sorting frequencies.

It has also been determined that a ratio of one radio channel per 25,000 people is acceptable for public safety services communications needs. As a minimum, any county would require a minimum number of channels, say two channels. For example, a county with a projected population of 247,000 people would be eligible for 9.88 channels, which would be reounded up to 10 channels. A county of less than 50,000 would always get 2 channels.

If there were one or more known eligibles at the time of the plan within that county, their channel needs would be subtracted from the county pool of channels, leaving a lesser number of, or zero, channels available within the county for future assignment. For instance, if the example county had known eligibles who justified assignment of 6 channels, then the county pool would be reduced to four channels. On the

other hand, if known eligibles had justified need for 10 or more channels, then there would be zero channels in the county pool for future assignment.

Before beginning the process of preparing the information to be entered into the computer program for sorting the frequencies in a spectrum efficient manner, one needs to consider the following.

1) Remember that the task being done is a geographic sort of frequencies, NOT A SYSTEM DESIGN. Therefore, the coordinates and range data tabulated should describe the geography and not necessarily be actual user antenna sites.

2) Where there are known eligibles in a county, the known eligibles are to be considered first, to the exclusion, if necessary, of county pools for future assignment.

3) Where there are no known eligibles in a county, a county pool is to be established from which future assignments will be drawn.

4) The number of channels to be allocated to county pools should be related to the population of the county, with every county receiving a minimum number of frequencies.

Protection Ratios:

There are two protection ratios built into the computer program. One is for the co-channel case, and the other is for the adjacent channel case. The default ratios provide 35db Desired/Undesired signal ratio for co-channel assignments, and 15db Desired/Undesired ratio for the adjacent channel case. These ratios should provide a probability of interference of less then 1%. It is strongly suggested that these values be used. However, they are adjustable in the program on a global basis, but NOT on a per system basis.

Transmitter Combining:

The computer program is designed to provide a minimum frequency separation between any two channels assigned to the same eligible at the same site. This separation is provided in order to enable more efficient combining of multiple transmitters to a single antenna. These separated blocks of frequencies also have a maximum size. That is to say, if the eligible has more frequencies then the maximum size of the combining block, then a new compatible block is created.

Each of these parameters is adjustable in the program on a global basis. The default parameters are 0.25MHz minimum spacing and five channel blocks. These seem reasonable and are strongly recommended.

Special Considerations!

There are a number of existing licensees in the 806-821/851-866 MHz spectrum who plan to expand existing systems into the 821-824/866-869 MHz band. Existing radio units are unable to operate on 12.5KHz separated carrier frequencies. That is to say, the synthesizers can only generate frequencies every 25KHz. The result is that these radios can only operate on "even" FCC numbered channels in the 821-824/866-869 MHz band. The computer program is able to take this into account when making assignments. Therefore, the need to implement this restriction becomes a necessary part of the input data.

At the risk of confusing the reader, it must be pointed out that if the existing 806-821 MHz radios are operating on off-sets (as authorized in proximity to the Mexican border in Southern California), then the 821-824 MHz channels assigned must be "odd" FCC channel numbers.

How to define Geography

For the purpose of this frequency sort, a geographic area is to be defined as one or more circles of equal radius. To the degree practical, this circle or circles should include the entire area of the eligible's geopolitical boundary, but not exceed the boundary by more than three miles. Note, that if more than one circle is used to define an area, all of these circles must be of equal radius. This is a restriction of the computer program. The largest circle radius acceptable is 25 miles.

So, the procedure is to gather maps of sufficient detail, outline the areas to be defined, determine the co-ordinates and radius of the circles which define each area, and tabulate the data. It is recommended that 2 degree maps be used for this purpose.

Blocked Channels

In each region there will be at least the five national mutual aid channels which must be blocked out to prevent the computer from making assignments on those channels. In addition, large region-wide systems must be identified for the same reason. In this case, one must also consider whether or not the adjacent channels to these region wide assignments must also be blocked. Since the mutual aid channels are spaced at 0.5 MHz intervals, it is recommended that these region-wide systems also be spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.

Define The Environment

In your best judgement, is the county to be considered urban, suburban, open or quasi-open? Use the following indicators:

1 = Urban

2 = Suburban

3 = Open

4 = Quasi Open

1-Urban is a built-up city crowded with large buildings or closely interspersed with houses and thickly-grown trees. This would include the downtown area of a major city.

2-Suburban is a city or highway scattered with trees, houses and buildings. This would include the non-downtown area of a major city.

3-Open is an area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300-400 meters ahead. This would include farm land, open fields, etc.

4-Quasi-open is an area between suburban and open areas. This includes areas outside of city limits that have few buildings and houses.

Number of Channels to be assigned

The number of channels to be assigned to each eligible, whether a known entity or a pool for future assignment, will be determined by other procedures in the Regional Plan. Therefore, it merely becomes a piece of input data in the assignment program.

Who is to receive channel assignments?

The eligibles who are to receive channels is a list determined by other procedures in the Regional Plan. Therefore, the list is just a list to be used as input to identify the eligibles.

What the Program Does

1. Input data for the Region (single site systems first)
   -Name (entity-county)
   -Co-ordinates
   -Range
   -Environment
   -Blocked/Protected Channels
   -Even/odd channel requirements

2. Select parameters
   -Combiner spacing
   -Maximum spectrum to be used
   -Number of Iterations allowed
   -Protection Ratios for co-channel and adjacent channels

3. Computer determines an ERP/Ant. Height combination which places the 40dbu point at the range specified, in the environment specified for each system.

4. Computer calculates distances between all possible combinations of single site and multiple site systems.

5. The computer uses its input tables to determine compatible assignments such that the signal strength at a co-channel assignees boundary is < + 5 dbu, and the signal strength at an adjacent channel assignees boundary is < + 25 dbu.

6. If the maximum spectrum allowed is filled before all systems are assigned channels, then the list is re-ordered according to the difficulty of assignments, and another iteration is made.

7. If the maximum number of iterations is reached before all assignments are satisfied, the maximum spectrum allowed is increased and the process begins again. The maximum spectrum allowed is initially set at a value which will fail to find a solution. By incrementing its value on successive attempts, the first successful run should be the most spectrum efficient case this program will ever find.

8. In the event that the spectrum needed exceeds the FCC allocations, to get a solution the following adjustments can be made.
   -Number of assignments must be reduced
   -System ranges must be reduced
   -Protection ratios must be reduced
   -Number of iterations must be increased
   -Combinations of the above

Output Reports

1) Input Data For Assignment Program
   -Data input from Region.
   -Adds ERP and Antenna Height determined by the computer
   -needs to be checked for accuracy

2) FCC Channel Assignments
   -Assignments ordered by channel number
   -This list will eventually go to the FCC

3) Sites and Assigned Channels
   -Ordered by Site (User)
   -FCC channels within site in numerical order
   -useful for checking combining assignments
   -useful for checking even/odd assignments

4) Detailed Assignment lists
   -a very useful tool for trouble shooting the computer output

Format for Transmitting Information to Computer

A standardized format for transmitting the necessary infomation to the computer program would look like this:

A list of pre-assigned region wide channels and channels reserved for protection must also be supplied.

Blocked Channels

In each region there will be at least the five national mutual aid channels which must be blocked out to prevent the computer from making assignments on those channels. In addition, large region-wide systems must be identified for the same reason. In this case, one must also consider whether or not the adjacent channels to these region wide assignments must also be blocked. Since the mutual aid channels are spaced at 0.5 MHz intervals, it is recommended that these region-wide systems also be spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.

Define The Environment

In your best judgement, is the county to be considered urban, suburban, open or quasi-open? Use the following indicators:

1 = Urban

2 = Suburban

3 = Quasi Open

4 = Open

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4-Open is an area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300-400 meters ahead. This would include farm land, open fields, etc.